

The Digital Brain Switch: Managing Rapid Transitions Between Role Identities in a Digital World

Abstract In this paper, we present initial findings from an EPSRC-sponsored multi-disciplinary research project investigating how digital technologies and social media affect role transitions across work-life domains. The research uses an innovative combination of visual diaries and narrative interviews to capture micro-transitions ('switches') and explore these with participants in the context of their overall lives. Findings from a pilot study with academics are reported here in terms of: emergent digital boundary management strategies; triggers for rapid switching and the effects of this; and the function of meta roles and multi-role cognitions. The research contributes to current thinking in work-life literature in terms of devising innovative methods, focusing on the micro-transitional and in considering the role of the digital and social media in boundary management.

Introduction

Work-life balance (WLB) has been a focus of research over several years (Roberts, 2007). Within the WLB literature, it is argued that we live our lives within different social domains (e.g. work, family, community) and that we are expected to play different roles within these domains (e.g. breadwinner, father, volunteer). A role "provid(es) a set of social expectations or normative behaviours that prescribe how an agent should occupy a social situation, position or status level" (Simpson & Carroll, 2008). More specifically, Ashforth et al (2000) argue that a role "cues or connotes a certain persona", which they term a 'role identity'. In other words, the focus of role identity is very much on how the individual experiences and enacts the (socially-defined) role. Because of the complexity of these role identities, it is argued that we create physical, temporal and psychological boundaries or borders between them (Clark, 2000). However, having created these boundaries, we then have to transition across them (Ashforth et al, 2000). While we have developed rituals and practices to help this transition, such as dressing for work and the commute, this process is helped or hindered by the 'permeability' or 'flexibility' of the boundaries (Nippert-Eng, 2006).

The rise in the use of digital technologies challenges work life boundaries, particularly as individuals increasingly work from a range of locations (Hislop, 2008), experience frequent interruptions (Rennecker & Godwin, 2005) and feel required to 'stay connected' through multiple communication channels (Reinsch et al, 2008; Turkle, 2010). More specifically, such technologies may create particular problems of identity management as we work to service a variety of role identities across different media. Indeed, we might argue that the range of role identities available to individuals is considerably widened by the use of various kinds of digital media (Papacharissi, 2011). Previous research on identity transition has tended to draw on fairly lengthy transition periods (even micro-

transitions are seen to be as long as a commute, Ashforth et al, 2000) but digital technologies and flexible working may make these transitions more like ‘switches’ – very rapid and indeed more or less simultaneous - as we move from smart phone to social media site to email and so on.

Digital technology may both create additional boundaries and create problems for maintaining boundaries (e.g. MacCormick et al, 2012) but has also begun to be implicated in the effective management of boundaries (Golden & Giesler, 2007) including the provision of digital tools that support WLB through self-monitoring technology, with an aim to better understand oneself, thus supporting healthy, meaningful and fulfilled living. It has been recognised that healthful intent in daily activities can yield dramatic positive health effects (Crum and Langer 2007). This concept of self-monitoring is obvious with health related issues such as over-consumption of alcohol or food, or chronic disease management. The risks are often less obvious with WLB. In our research programme, we hope to provide individuals with a novel way to monitor their activities and their role identity transitions to increase awareness of their work-life balance, thus having the potential to better regulate this transition to improve well-being.

The Digital Brain Switch Project

Sponsored by the EPSRC, and involving a multi-disciplinary research team, the project described in this paper seeks to achieve an in-depth understanding of how individuals manage transitions (or “switches”) between role identities in both the corporeal and digital worlds, and to develop digital prototypes that will allow us to explore potential solutions to switching issues. The central research questions to be explored are:

- How do digital technologies and social media affect our ability to manage rapid transitions (‘switches’) across work life boundaries, and particularly between role identities?
- What new practices have evolved to incorporate these digital switching processes?
- How can we support individuals in these ‘switching’ activities ?

The project itself is in its early stages and is currently focused on the first two of these questions. Here we report our findings from the initial pilot stages of the project, however, by the time of the IWP conference we will have gathered and analysed data from our main sample groups.

Design and Methods

The researchers are using an innovative combination of video diaries, narrative interviews, behavioural sensing (Eagle and Pentland, 2006) and participatory design (Mogensen, 1991) to address the research questions, and are investigating these issues in three different social groups:

social entrepreneurs, university students, and corporate employees. The three different participant groups are selected to provide potentially contrasting experiences of both WLB and digital technologies:

- *Social Entrepreneurs and Community Group Leaders*: particular WLB challenges may include financial insecurity, moral commitment to work goals, and lack of a defined workplace.
- *Corporate Employees*: particular WLB challenges may include having less control over work processes and use of technologies, and a variety of more closely defined role identities
- *Student groups*: a younger demographic sample whose WLB challenges may include ill-defined work-life boundaries, extensive use of social media, and identity permeability

These participants are primarily taking part in the video diaries, narrative interviews and participatory design activities. At the time of this submission, we have analysed video data from a pilot study of 11 working academics, which has already provided a rich source of both visual and thematic data. We describe this process and the resulting findings in this submission. We are currently conducting video diaries and follow-up interviews with the social entrepreneur group. By the time of the conference, we will have completed video diaries and interviews for all the participants, and will be able to report data from across all three groups. In this sense, then, the data reported here are indicative rather than definitive.

Video Diaries: The aim of the video diaries is to capture real-life ‘switches’ as they happen: these can be between or within digital/physical worlds, and can be of seconds or several minutes duration. Each participant is asked to keep a video diary of any ‘switching’ they note across different aspects of their lives for a period of one week. Participants are initially given a briefing session in which the research project is described in more detail, and the technical aspects of the camcorders explained. Participants are shown examples of potential video clips, however, as part of our objective is to understand individuals’ interpretations and experiences, they are left to make their own decisions as to what constitutes a ‘switch’ for them. We suggest participants may narrate their filming but this is not a requirement. At the end of the week, participants are debriefed and return the video recordings. Video excerpts are initially analysed using mindmapping software, Simple Minds, to identify themes across participants before being entered into nVivo10.

Narrative Interviews: After debriefing, participants are invited to attend an hour long recorded interview. The aim of the interview is partly to discuss some of the video excerpts collected, but also to embed these discussions in a more in-depth understanding of the participants’ lives, and to explore their own constructions of work-life balance, switches and technology use. Prior to the

interview, participants are asked to review their video excerpts. Meanwhile, the researchers also view the excerpts, and select 3 – 5 excerpts to discuss in the interviews as ‘critical incidents’. Interviews take place in either the participants’ work offices or offices of one of the universities involved in the research. Interviews cover three main topic areas: occupational background and technologies used; work-life balance including strategies for managing this; and switches, including triggers for switching. Recorded interviews are fully-transcribed and also entered into nVivo10 for initial thematic analysis.

Pilot Results

Here we focus on the emergent results from the pilot study of video recordings to give a flavour of the fuller data set to be discussed at the conference. While the analysis has already provided a complex web of related themes, we concentrate on three in particular at this stage:

Boundary management

Participants in the pilot study distinguished four main boundary management strategies: temporal, locational, technological and language-based. In the case of temporal boundary management, for example, buffer zones were created where the participants may be recovering from an earlier role (e.g. watching TV between moving from work office to dinner preparation) or preparing for a new role identity (e.g. changing clothes to move from employee to theatre-goer). In the second case, participants recorded themselves moving to different locations as part of their role switching, thus taking an ipad downstairs from an upstairs home office was seen as switching from work to home mode. Sitting on the floor to access email on an ipad was described as taking a break or signalling a move away from a work role. Thirdly, boundaries could be maintained through segmentation of technologies (e.g. ipad with access only to personal emails, while work emails accessed on pc) or switching off or disabling elements of devices to avoid prompts. In the final case, one multi-linguist switched between languages in maintaining boundaries between work and leisure roles.

Switching

Amongst our pilot sample, switching could be driven by choice (perhaps because of personal energy levels) or could be an external interruption. In this latter case, this was sometimes viewed as detrimentally interrupting the mental ‘flow’ but, where boundaries were conceived as fluid, could also be seen as a positive benefit where new ideas and activities were introduced. Of particular interest was a kind of ‘liminal’ state where participants suspended themselves between roles, perhaps being interrupted but not fully inhabiting the new role introduced. One participant talked of being engrossed in one role, having to switch quickly to another (e.g. without a ‘buffer zone’) and

being in a state of 'limbo' as they tried to emerge from the first and fully engage with the new role. Multiple occasions of this were experienced as mentally exhausting.

Meta-Roles and Multi-Role Cognition

While clearly our sample were able to capture instances of switching between different roles, an emergent recognition was of a meta 'organising' role that was seen to transcend specific roles. This participants recorded instances of planning across roles at the beginning or end of the day. Particular conversations could trigger consideration of implications across roles, and some activities while apparently relevant to a particular role, triggered thoughts about other roles. Participants could switch seamlessly between roles in this micro-transitional way, problematising some essential divide between role domains.

Discussion and Conclusion

Others have examined boundary management strategies in the past (e.g. Cohen et al, 2009; Sturges, 2012) and transition strategies (e.g. Ashforth et al, 2000; Kreiner et al, 2009) and our research supports some of the conclusions discussed in these other studies. For example, even at this early stage of the research, we support the idea of 'dynamic' boundary management (Cohen et al, 2009), where the same individual may sometimes favour work-life segmentation and sometimes integration depending on context. However, our research makes several further contributions:

1 Our research makes a methodological contribution in the visual capturing of specific events and 'in-the-moment' cognitions, which then form critical incidents for discussion with the participants. At the conference we would wish to share some of these visual excerpts in order to demonstrate both the power of the imagery in sharing experiences and their efficacy in prompting intricate accounts.

2 This visual capturing, in turn, allows us to focus on the micro-transitional nature of 'switches' - very swift movement between roles – enabling the capture of dynamic boundary and identity management as it unfolds.

3 Our focus on the digital allows us to explore how the contemporary and complex experience of social media (transitioning across multiple blogs, networking sites and instant messaging) is incorporated into our boundary management and work life balance.

Even at this stage of the research, we are convinced of the insight provided by the video diary and interview combination. Indeed, participants themselves have remarked on how the process of videoing their own activities has encouraged them to change their everyday practices. For example,

one male academic reported now leaving his mobile phone in his office when he goes out for lunch with colleagues; another female academic has noted that she is continuing transitioning practices forged with older technologies into her use of new more advanced technologies where they are no longer required and has changed her habits accordingly.

At the conference, we would like to discuss in more detail not just our main sample data but also the participatory design practices which are leading to the development of a (social media based) research platform for managing the research participant's engagement with the project and piloting potential interventions.

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